Settler Colonialism, Ecology, and Environmental Injustice

Kyle Whyte

ABSTRACT: Settler colonialism is a form of domination that violently disrupts human relationships with the environment. Settler colonialism is ecological domination, committing environmental injustice against Indigenous peoples and other groups. Focusing on the context of Indigenous peoples' facing US domination, this article investigates philosophically one dimension of how settler colonialism commits environmental injustice. When examined ecologically, settler colonialism works strategically to undermine Indigenous peoples' social resilience as self-determining collectives. To understand the relationships connecting settler colonialism, environmental injustice, and violence, the article first engages Anishinaabe intellectual traditions to describe an Indigenous conception of social resilience called collective continuance. One way in which settler colonial violence commits environmental injustice is through strategically undermining Indigenous collective continuance. At least two kinds of environmental injustices demonstrate such violence: vicious sedimentation and insidious loops. The article seeks to contribute to knowledge of how anti-Indigenous settler colonialism and environmental injustice are connected.

■ **KEYWORDS**: anticolonialism, climate justice, decolonization, resilience, resurgence, sustainability

Diverse persons, including scholars, writers and activists, have described settler colonial domination as violence that disrupts human relationships with the environment. Lee Maracle writes that "violence to earth and violence between humans are connected" (2015: 53). Eve Tuck and K. Wayne Yang discuss how "the disruption of Indigenous relationships to land represents a profound epistemic, ontological, cosmological violence" (2012: 5). Vanessa Watts claims that "the measure of colonial interaction with land has historically been one of violence . . . where land is to be accessed, not learned from or a part of" (2013: 26). The Women's Earth Alliance and The Native Youth Sexual Health Network recently produced a report entitled *Violence on the Land, Violence on Our Bodies: Building an Indigenous Response to Environmental Violence.* The report states that colonially supported extractive industries create "devastating impacts of environmental violence" (WEA and NYSHN 2016). J.M. Bacon refers to "colonial ecological violence" as a process of "disrupt[ing] Indigenous eco-social relations" (2018: 1).

I seek to investigate philosophically one dimension of how settler colonialism commits environmental injustice through the violent disruption of human relationships to the environment. The dimension concerns how settler colonialism works strategically to undermine Indigenous peoples' social resilience as self-determining collectives. Engaging Anishinaabe (Neshnabé) intellectual traditions, I will offer an Indigenous conception of social resilience and self-determination



that, for short, I will call collective continuance. I will then show how settler colonialism commits environmental injustice through strategically undermining Indigenous collective continuance. Using this understanding of environmental injustice, I will conclude by showing how settler colonialism engenders at least two kinds of environmental injustices against Indigenous peoples: (1) vicious sedimentation and (2) insidious loops.

While my starting point of analysis is anti-Indigenous violence that disrupts human relationships with the environment, I am not attempting here to define absolutely what such violence is or entails. I am also not trying to create the single theory of environmental injustice that can somehow explain every wrongdoing. The theory offered here in outline seeks only compatibility and complementarity with a variety of other approaches to violence and injustice that are well argued for across Indigenous studies and related fields, such as settler colonial studies and critical environmental justice studies. I will also isolate US settler colonial domination for analytic purposes in this article, especially the oppressive relationship between US settler populations and Indigenous populations. The theory I will offer here should, when further elaborated elsewhere, be able to connect to more complex, intersectional, and globally integrated accounts of ecological domination within, before, and beyond US settler colonialism.

Collective Continuance and Ecology

Interdependence, Systems of Responsibilities and Migration

Human and environmental relationships have many possible values, including, among others, spirituality, sustainability, senses of place or home, and communion with nonhumans. I will describe a theory of value that I have developed out of my own embeddedness in a range of traditions. Here I will focus on a slice of the studies and voices of Anishinaabe peoples that have shaped my thinking as a Potawatomi scholar, activist, relative, citizen, and community member. I will describe one value, which I will refer as collective continuance, by connecting three concepts in Anishinaabe intellectual traditions: (1) interdependent relationships (or interdependence), (2) systems of responsibilities, and (3) migration. The theory of collective continuance I will develop combines these concepts to suggest a value that is similar to social resilience in its relationship to self-determination.

In saying Anishinaabe peoples, I am invoking broad intellectual traditions connecting Ojibwe, Potawatomi, Odawa, and Mississauga and related peoples who have diverse contemporary and ancient linguistic, cultural, social, and political connections. These intellectual traditions often occur in contexts connected to and in dialogue with neighboring peoples, including the Menominee, Miami, Haudenosaunee and numerous others. While I will use Anishinaabe for short here, I caution that the diversity of Anishinaabe peoples means that there is a whole range of inquiries and studies for which it is inappropriate to use such a broad designator (or English-language spelling) as Anishinaabe. Throughout this section, I will use the term "the environment" to reference many different relationships connecting human and nonhuman living beings (plants, animals, persons, insects), nonliving beings and entities (spirits, elements), and collectives (e.g., forests, watersheds). The environment is not a precise or culturally accurate term, though for reasons of space, I will rely on it.

To begin with, the first concept is interdependence. Going back to the nineteenth century and earlier, Anishinaabe responses to US-settlement-invoked concepts of interdependence with the environment. D. Ezra Miller has researched how in the Treaty of October 23, 1826 with the Miami Tribe, one Potawatomi leader, Awbanawben, told the following to US settlers in a speech:

"You said we could not stay here. We would perish. But what will perish [?] But what will destroy us [?] It is yourselves destroying us. . . You trampled on our soil, and drove it away. Before you came, the game was plenty, but you drove it away. . . You point to a country for us in the west, where there is game . . . but the Great Spirit has made and put men there who have a right to that game and it is not ours" (Miller 2016).

Awbanawben, in nineteenth-century rhetoric, is concerned about interdependence of humans and nonhumans in ecosystems. US settlement is viewed as violating these relationships, for Potawatomi but also peoples who will be displaced by any Potawatomi relocation processes imposed by the US. While in the nineteenth century many different people referred to the importance of game or good farming conditions, I can just note here that Awbanawben clearly identifies how particular human societies are entangled in relationships of interdependence with the environment and have habituated themselves to particular ecosystems.

Diverse sources of Anishinaabe intellectual and artistic traditions bring out different senses of interdependence. Louise Erdrich, in *Books and Islands in Ojibwe Country*, writes of how for the late Tobasonakwut, an Anishinaabe elder, "His people were the lake, and the lake was them. . . . As the people lived off fish, animals, the lake's water and water plants for medicine, they were literally cell by cell composed of the lake and the lake's islands" (Erdrich 2006: 34). Robin Kimmerer calls relationships of interdependence the "covenant of reciprocity," which refers to relationships organized among relatives who have gift-giving and gift-receiving responsibilities to each other: "In Potawatomi, we speak of the land as *emingoyak*, 'that which has been given to us,' a gift that must be reciprocated with our own" (2010: 143–144).

Aimée Craft has analyzed the newspaper accounts of the 1871 negotiations of Treaty 1 involving Anishinaabe, Cree and Canadian representatives. Craft writes that "Chief Ayeeta-pepe-tung spoke to the Queen's negotiators about his 'ownership' and his view that rather than owning it, he was *made of the land*" (Craft 2014, 16). Megan Bang and Douglas Medin describe research they have been involved in in the Great Lakes with members of the Menominee Tribe and the Chicago urban Indian community. Based on these studies, they suggest that "Native parents said they want their children to realize that they are part of nature . . . were also more likely to mention . . . the idea that no creation is more important than or 'above' any other creature" (2010: 10).

The concept of interdependence includes a sense of identity associated with the environment and a sense of responsibility to care for the environment. There is also no privileging of humans as unique in having agency or intelligence, so one's identity and caretaking responsibility as a human includes the philosophy that nonhumans have their own agency, spirituality, knowledge, and intelligence. Potawatomi people, in daily speech, often say that nonhumans have the capacity for knowledge but humans really do not (Kimmerer 2013). Thus, humans ought to take responsibility to be respectful of nonhuman ways of knowing. In my experiences, some Anishinaabe persons identify primarily through nonhuman identities, such as clan identities (e.g., crane, bear, turtle). Heidi Bohaker shows the importance of nindoodemag (clan identities) for Anishinaabe historically. Bohaker describes them as "kinship networks" where people "conceived of themselves as related to and having kin obligations toward those who shared the other-than-human progenitor being." Nindoodemag networks were crucial for "social and political life . . . [they] shaped marriage and alliance patterns and facilitated long distance travel; access to community resources . . . [and] operated as an important component of Anishinaabe collective identities" (Bohaker 2006, 25-29).

So at least for some Anishinaabe persons historically and today, it is not necessarily true that such an identity as "the human" as a distinct or uniquely rational or knowledgeable type of being even exists. In these ways, interdependence can be thought of as intrinsically valuable. Inter-

dependence is a source of identity for how humans understand whom and what they are in the world, but the concept of interdependence is also instrumentally valuable. For interdependence is also a means to motivate humans to exercise their caretaking responsibilities to their relatives, human and nonhuman, which helps motivate these relatives to exercise their reciprocal responsibilities to nourish and support one another in diverse ways.

Interdependence highlights reciprocity or mutuality between humans and the environment as a central feature of existence. In Anishinaabe traditions, reciprocity is also systematized. That is, environmental identities and responsibilities are coordinated with one another through complex social, cultural, economic, and political institutions. Interdependence suggests a much larger system of "reciprocities" that characterize many hundreds of relationships of interlocking/intersecting relationships across entire societies. The second concept, then, is "systems of responsibility," in which responsibility refers to relationships with reciprocal expectations.

Deborah McGregor, in her work with Josephine Mandamin and Anishinaabe women's water movements, discusses how to think systematically about the different lives that water supports. Water supports "plants/medicines, animals, people, birds, etc." and—reciprocally—there is "the life that supports water (e.g., the earth, the rain, the fish)." The system is based on responsibilities such that "water has a role and a responsibility to fulfil, just as people do" (2009: 37–38). McGregor writes that "All beings have responsibilities to fulfil, and recognizing this contributes to a holistic understanding of justice. Our interference with other beings' ability to fulfil their responsibilities is an example of a great environmental injustice, an injustice to Creation" (40). McGregor's writing opens onto philosophizing about larger coordinated networks of responsibilities that ought to constitute Anishinaabe institutions.

Brenda Child describes systems of responsibilities through interpreting anthropologist Frances Densmore's work with Nodinens, an elder. Child describes how Ojibwe peoples "lived according to a seasonal round, each year taking advantage of opportunities to hunt, fish, farm, and gather wild foods in a highly systematic way of life." For Child, the seasonal round is not an accidental arrangement of responsibilities: "It was a way of life passed down by the generations and required study, observation of the natural world, experimentation, relationships with other living beings on the earth, and knowledge-generating labor" (2012: 30). A "seasonal round" is a type of governance in which the major social, cultural, economic, and political institutions of a society shift in shape, size, and organizational structure throughout the year. Child's reference to "relationships" connects to the responsibilities described by McGregor. Child highlights that morality, knowledge and inquiry, and labor are systematically coordinated in the seasonal round.

Gender is another way to understand Anishinaabe systems of responsibility. People who today code as women exercised a range of leadership roles, whether as knowledge keepers (experts) of particular plants and animals, visible leaders and diplomats, or servant leaders (such as a through participation on committees tasked with selecting visible leaders) (Sleeper-Smith 2001; White 1991). Historians, including Child (2012), Susan Sleeper-Smith (2001), Jean O'Brien (1997), and Richard White (1992), describe Anishinaabe and broader Algonquian gender and kinship relationships for women as focused less around obligations confined to roles in patriarchal marriages and focused more around multifarious and diverse responsibilities to their parents, siblings, grandparents, clan members, members of other social units (e.g., lodges, bands, etc.) and trading partners from other societies.

Perhaps most significantly, Anishinaabe intellectual traditions do not emphasize a binary gender system, but rather embrace gender diversity and fluidity. According to Margaret Noodin, "Anishinaabe language and culture acknowledge gender difference, but in a way that relies on choice and context rather than fixed and predictable rules" (2014: 12). Niigaan Sinclair has written about Ozawwendib, an Anishinaabe and Two-Spirit person who lived in the early 1800s. In

the record, especially but not exclusively from the perspectives of settlers, this person's behavior broached and mixed many binary gender norms. Sinclair discusses how Ozawwendib nonetheless "appeared to live without shame, apology, and fear" in their society and was among the most respected experts in environmental skills and knowledge (2016: 14).

Sleeper-Smith's (2005) work shows what I interpret as the U.S. introducing patriarchy and sexism to disrupt trust, consent, and diplomacy in their interactions with Anishinaabe peoples. Sinclair's (2016) work shows the overt sexism, gender discrimination, and discomfort of US and Canadian settlers who responded to Ozawwendib's gender and sexuality. These norms, tied to binary assumptions about gender, formed a stark contrast between the complex and multifarious responsibilities, relationships, and leadership positions to which many Anishinaabe women and persons of nonbinary genders were accustomed. Though here I want to caution that, in presenting a theoretical account in this article, I am emphasizing what I take to be positive qualities of Anishinaabe gender systems in the absence of a more detailed discussion of gender oppressions that occurred in periods like the transatlantic fur trade, such as human trafficking.

Systems of responsibilities also involve government and diplomacy across different peoples. John Borrows claims: "Aboriginal peoples developed spiritual, political, and social conventions to guide their relationships with each other and with the natural environment. These customs and conventions became the foundation of many complex systems of government and law" (2002: 37). This idea, of course, is reflected in points cited earlier, such as references in McGregor's and Craft's work to how interdependence and systems of responsibilities are related to treaty-making (diplomacy) and justice. Leanne Simpson has supported reinvigorated interest in the Dish with One Spoon treaty between Anishinaabe and Haudenosaunee peoples in the Great Lakes region. Simpson writes that "Gdoo-naaganinaa [the dish] acknowledged that both the Nishnaabeg and the Haudenosaunee were eating out of the same dish through shared hunting territory and the ecological connections between their territories . . . both parties were to be responsible for taking care of the dish. . . . All of the nations involved had particular responsibilities to live up to in order to enjoy the rights of the agreement. Part of those responsibilities was taking care of the dish" (2008: 37).

Migration is the next concept I will discuss having now discussed interdependent relationships and systems of responsibilities. Anishinaabe philosophies often involve migratory themes such as constant motion, change, transformation, mobility, and adjustment. However, I would like to note that the following discussion of migration is not intended to normalize one particular type of mobility, which would be morally problematic. Instead, I seek to discuss how societies can be organized to best adjust to the ecological and social dynamics they face. Migration suggests that relationships of interdependence and systems of responsibility are not grounded on stable or static relationships with the environment. Rather, these relationships arise from contexts of constant change and transformation. A key idea is that relationships that are constantly shifting do not sacrifice the possibility of continuity.

Michael Witgen (2011), for example, discusses the territory of Anishinaabewaki in the Great Lakes region during the transatlantic fur trade period. Anishinaabewaki was a place where people were connected to each other through diverse kin relationships rooted in particular ecosystems. Individual persons were actually complex identities associated with the *many* places where they engaged in economic and cultural activities throughout the year in their seasonal rounds associated with their nonhuman ancestors (i.e., clan memberships), families, bands/tribes, lodges, ceremonial communities, romantic ties, and diplomatic protocols. At a particular place and a particular time during the calendar year, someone might primarily be known as a "trader" or member of "clan y." But that was just that person's identity at that place and that time of year. Identity was always shifting.

Shifting identities and shifting governance authorities are a part of the seasonal round governance system. One version of the seasonal round is the 13 moons system articulated by many Anishinaabe authors. Depending on the community, moons usually have names and meanings that correspond to or indicate the particular combination of plants and animals that are monitored, harvested, stored, used, or consumed and recycled during those times. Particular lodges, clans, or other organizational units have different responsibilities for convening people in particular locations during those times of year to facilitate monitoring or harvesting. Instead of a central government, there are diverse family, band, lodge, clan, and other organizations whose authority and responsibilities change throughout the year.

Seasonal round governance expanded and contracted throughout the year so that social, cultural, economic, and political institutions were organized to approximate, as best possible, the seasonal dynamics of ecosystems. Ecosystems, of course, include the impacts of human social systems. Witgen (2011) cites and agrees with the anthropologist Regna Darnell (1998) that the seasonal round is an "accordion" system of governance in its constant spiral of expansion and contraction in response to change (see also Child 2012; Johnston 1976).

The philosophies behind the seasonal round involve migratory concepts such as transformation, cyclical time (in the sense of spiraling time), and shape-shifting. Heidi Stark writes: "The Anishinaabe transformed themselves, adapting to their ever-changing environment. Importantly, the stories maintained about Nenabozho often conveyed the importance of change. Anishinaabe nationhood has never been static or fixed. Indeed, no nation can or has survived without undergoing constant change" (2012: 124). Gerald Vizenor's concept of "survivance" connotes continuity through constant change: "Native survivance stories are renunciations of dominance, tragedy, and victimry" (1999: vii). Sinclair interprets Vizenor's work as having direct implications for governance as constantly shifting. Sinclair writes that "transmotion is, in fact, a cultural, political, and historical Anishinaabeg method of continuance" (2009: 137), citing Vizenor's articulation of transmotion in which Vizenor connects together the "natural right of motion" with the maintenance of "continuous sovereignty" (quoted in Sinclair 2013: 248)

Time is also understood as in motion. Kimberley Blaeser, in a conversation with Jennifer Andrews, writes about the philosophy of time involved in her work:

[KB] There's the circular shape, but there's also the lateral, the different strands on the spider's web, and then I envision what happens when a fly lands and there's a vibration. So we're talking about the vibration, the motion, the movement, and I guess it's that idea of being in the essence of movement that is in a continuum; we're in a constant evolution and yet at the same time it reconnects us, and so it folds back, and maybe it's like a. . .

[JA] An accordion.

[KB] Yeah! When you talk about a circle, you're still restricting it to a single dimension. (Andrews and Blaeser 2007)

Spiral or accordion conceptions time (or temporality) can make transformation possible in different respects. Witgen (2011) discusses ceremonies in which different peoples transformed themselves into relatives in order to facilitate diplomacy. In one fur-trade era ceremony, Anishinaabe, Cree, and Dakota peoples buried the bones of their ancestors together to render themselves kin for the sake of coordinated collective action in response to the presence of European traders and settlers. Hence, kin is not just based on birth or biology, as Indigenous studies scholars more broadly have discussed (TallBear 2013). Witgen (2011) and Sleeper-Smith (2005) discuss how people took on new names during their lives, sometimes the identities of respected persons who had walked on.

The slice of Anishinaabe intellectual traditions that I have focused on here involves three concepts that, in the next section, I will discuss as interconnected: interdependence, systems of responsibilities, and migration. These concepts encompass a wide range of ways in which Anishinaabe live and theorize about environmental stewardship, ethics, gender, leadership, and cosmology. At least one possible nexus of these concepts, from my perspective here, is a theory of value of social resilience and self-determination that I will call "collective continuance."

Collective Continuance and Ecology

I see the concepts of interdependence, systems of responsibilities, and migration as converging on an important value for any society: collective continuance. Collective continuance refers to a society's capacity to self-determine how to adapt to change in ways that avoid reasonably preventable harms. Adaptive capacity is similar to what is often meant by the concept of social resilience. In the Anishinaabe intellectual traditions I just discussed, which predate "Western" concepts of social resilience, seasonal round governance systems are highly flexible webs of relationships. The relationships are based on particular responsibilities that each party in a relationship has. Building from my more simple definition offered earlier, responsibilities refer to the reciprocal (though not necessarily equal) attitudes and patterns of behavior that are expected by and of various parties by virtue of the different roles that each may be understood to play in a relationship. Reciprocity is understood through the gift-giving and -receiving relationship in which each party has a special contribution to make. But to become a party in a relationship, one must be transformed into a relative with reciprocal obligations, and transformation often occurs through ceremonies and other formal activities. Anishinaabe kinship relationships connected, via reciprocal responsibilities, humans with other humans, humans with nonhumans, whether spirits, plants, animals, or elements (e.g., water) and humans with particular places. The ways in which responsibilities are organized into interdependent systems facilitate the adaptive capacity of collective continuance, which I will discuss in more detail starting with the idea that responsibilities are not static or unchanging.

Consider the ancient Anishinaabe reciprocal responsibility with water and wild rice, for example. Some of my work is devoted to wild rice advocacy and conservation in the Great Lakes region, and I will be providing some general history and information here. The responsibility emerged during a particular point in the Anishinaabe migration story in which the travelers were told to stop when they arrived at the land where food grows on water. At this stopping point, they had to develop relationships with water and rice as relatives and establish reciprocal (gift giving/receiving) responsibilities that would support the lives of all relatives, from the nutritional and ceremonial uses humans gain from rice to the human stewardship and protection of rice habitats that rice gains from humans. Anishinaabe peoples today, in different ways, seek to maintain relationships of responsibility with wild rice and water for the sake of their identities, nutrition and environmental health, among other purposes. This is a persisting responsibility, or one that societies seek to continue into the future.

Emerging responsibilities are those that societies create through innovation to respond to new issues. For example, many Anishinaabe governments today hire scientific staff (often tribal members) who play key roles in monitoring and protecting wild rice and water. I know many tribes who seek to ensure that scientific work is performed responsibly, which means that staff are guided by elders, involve all generations of the community in their research and education, participate in tribal life, and ensure through events and other opportunities that they are held accountable by the community. I often interpret such situations as transformations of tribal

scientists into kin who have responsibilities to wild rice, water, and the community. Emerging responsibilities, like with wild rice so long ago, may become persisting responsibilities one day.

Philosophically, a key question is what makes systems of responsibilities capable of high degrees of adjustability through the interplay of maintaining critical persisting responsibilities and creating emerging responsibilities that best respond to change. I will claim here that one possible reason has to do with the ways in which responsibilities are organized to foster interdependence. Consider, again, responsibilities pertaining to wild rice and water. Particular people are vested by their communities with leadership to take care of rice and water. Often, women and members of particular clans are vested with this responsibility (Andow et al. 2009; Child 2012). Rice-harvesting camps, which involve interactions with water, are opportunities for different families and people to reaffirm bonds and share knowledge.

Various communities and families have special relationships to particular ricing areas and have developed diplomatic protocols for coordinating but not having to divulge secrets with other groups. Historically, from what I have heard, Anishinaabe people had protocols with other groups, such as Dakotas, who riced too, having their own sacred traditions. Wild rice and water, both their nutritional and spiritual place in Anishinaabe societies, are so integral to identity that some people, such as Frances Van Zile, say they would cease being Anishinaabe in their absence (quoted in GLIFWC 1995, regarding wild rice).

In the example of wild rice, the significance I want to highlight involves not just what types of relationships are or were prevalent. The types of relationships being described are reciprocal responsibilities (as opposed to rights, duties, contracts etc.). I want to focus on the qualities of the responsibilities that have developed over time, which foster interdependence. These qualities, including consent, diplomacy, trust, and redundancy, facilitate interdependence in ways that make it possible for the types of relationships to actually have the capacities to achieve social outcomes, including freedom, sustainability, cultural integrity, economic vitality, and so on. Trust refers to a quality of relationships among people in the community in which each party or relative, human and nonhuman, takes to heart the best interests of the other party or relative. People trust one another when they feel confident and at ease that the trustor takes the trustee's best interest to heart. Women's leadership involved thorough vetting processes that ensured that those responsible for rice were qualified and ceremonies served to reaffirm people's motivation publically to hold certain responsibilities. These processes and ceremonies also reaffirmed another quality, consent, which refers to people's capacity to approve or veto the actions of others that may affect them. That people passed vetting processes or engaged in ceremonies affirmed that people consented to their exercising certain responsibilities.

Redundancy is a quality that refers to states of affairs of having multiple options for adaptation when changes occur and for being able to guarantee sufficient opportunities for education and mentorship for community members. For example, in the case of wild rice harvesting, a society with high redundancy is one that can harvest from multiple ricing lakes in the event that some lakes stop producing rice for some period of time, whether naturally or through destruction or occupation by settlers. Redundancy also includes the distribution of wild ricing expertise across both numerous delegated leaders and all members of society who have to have sufficient skills and caretaking expertise to conserve wild rice. So, if a major delegated leader in wild rice walks on, there are many more people who can maintain the tradition. Redundancy is similar to buffering in resilience or systems theory.

Diplomacy is the quality of being able to engage in productive relationships with others without being forced to disclose matters that are sacred or that make one unacceptably vulnerable (and hence exploitable, especially by a more powerful party). Diplomacy occurs internally within communities, such as allowing members of certain genders to meet independently

to discuss key matters. Externally, there are also political protocols for sharing ricing regions without violating each community's (often secretive) sacred and economic relationships to rice. While diplomacy can be understood, in one respect, as the withholding of knowledge and information, it is, more importantly, true that relationships in which secrets are respected are ones in which the parties or kin to those relationships are more comfortable working together and expanding their work together. If each kin is confident in the safety of whatever it is that they do not want to disclose, then they can move forward together knowing that their consent to share what they are comfortable with is protected.

For Anishinaabe and many other Indigenous peoples, I would argue that people would say too that these qualities emanate, in different ways, from the nonhumans—though that discussion is for another piece of writing, given the complexity around what it means for nonhuman beings or systems to be in consensual, trustworthy, diplomatic, and redundant relationships with humans. I would argue that these qualities of relationships can see societies through some of the toughest of times, which means they support self-determined adaptive capacity that avoids reasonably preventable harms—that is, they support collective continuance.

High levels of trust in leadership, traditions of consent, and access to large areas of land facilitate adaptation to major environmental shocks. Within a society, these qualities, even in the face of less disruptive changes, create more freedom and a sense of attachment. One's having a sense of trust and consent gives someone the confidence to express how and who they are. Anishinaabe intellectual traditions can suggest aspirations toward very meritocratic societies, in which someone's having a leadership role has to do with how they have been vetted and proved themselves in action, not simply something tied alone to privileges associated with gender or heredity. A society with a high degree of what I call collective continuance is one that has many qualities of relationships like the ones I described. For me, these qualities are key elements of interdependence, yet it is an interdependence capable of transformation and change through facilitating persisting and emerging responsibilities. When these qualities decline in number and in practice, then society has less social resilience.

Patriarchy, a foundational aspect of US settler colonialism, is a system of relationships with few qualities of relationships. Patriarchal relationships involve low levels of society-wide trust and consent. They also involve low levels of diplomacy within society given their disrespect for privacy and consensual intimacy. Redundancy is also lowered if only men are responsible for knowing certain environments, which lessens the knowledge base and transferability of knowledge and skills within a society. It also reduces meritocracy as talented persons of diverse and nonbinary genders are denied opportunities to excel at their talents and gifts.

Forced relocation, another aspect of settler colonialism, whether through imposing reservations on Indigenous peoples or complete removal, threaten redundancy. Reservations, for example, furnish less access to places for harvesting and ceremonial practices. Boarding schools and policies, such as relocation, that divide and separate Indigenous communities destroy the basis for maintaining languages and cultural practices that are also tied to maintaining other qualities such as trust and consent. One reason I often hear for why many Potawatomi people want to restore intergenerational fluency in our language is that our own linguistic expressions have elements that are more trustworthy as means of communication than English.

The qualities of relationships and responsibilities that make up collective continuance are the bonds that create interdependency between human institutions (e.g., lodges, ceremonies, offices) and ecosystems (e.g., habitats, watersheds). In this way, I am describing an ecology, that is, an ecological system, of interacting humans, nonhuman beings (animals, plants, etc.) and entities (spiritual, inanimate, etc.), and landscapes (climate regions, boreal zones, etc.) that are conceptualized and operate purposefully to facilitate a collective's (such as an Indigenous

people) adaptation to changes. Ecologies here are understood in terms of their makeup of qualities of relationships. As in most understandings of ecology and agroecology today, the term "ecology" is not denoting systems or capacities always seeking to bounce back toward some equilibrium. Rather, it is much more about "transmotion," constant migration and the interplay between persisting and emerging relationships (Whyte 2015).

At the same time, newer challenges that fall outside that range, including global environmental change and the intervention of other societies (e.g., settler colonialism), may interfere with, perturb, or degrade the ability of certain qualities to provide valued aspects of a collective's quality of life, such as cultural integrity, freedom, food security, public health, and so on. While the term "ecologies" may strike some as strange, I use it to suggest not only ecosystems but also the calculated stewardship of them (hence the –logy). One way to understand the adaptive capacity of ecologies is through how well certain ecologies facilitate the interplay between persisting and emerging responsibilities (Whyte 2015).

Collective continuance then can be described as ecology. As a value, collective continuance can be used to understand many complexities today, such as a people's capacity to respond to environmental threats by engendering a sense of responsibility in its members that is intrinsically valuable to their identity. While I tend to write about collective continuance in terms of *a* society's collective continuance, the fact is that few people belong to *a single* society. But collective continuance is actually not based on a strict notion of belongingness. If I zoom to the level of a particular person's identity, they may belong, in different ways, to multiple societies, similar to the migratory concepts I described earlier. Each society has its own relationships of reciprocal responsibilities or lack thereof. Someone's capacity for self-determination and well-being is in part related to whether they are in relationships with qualities such as those I have enumerated. These qualities of relationships, whether particular to a society or overlapping across societies, have everything do with that persons' capacity to adapt to changes in ways that maintain as much well-being and self-determination as is feasible depending on the times they live in and forces they are encountering.

The Ecology of Settler Colonial Domination

The concept of collective continuance can explain some of the reasons why settler colonial domination is ecological violence and environmental injustice. I am now using "ecology" in the sense defined earlier in relation to collective continuance. Recently, settler colonialism has been articulated as a theory of domination and a field that is associated with non-Indigenous scholars (Veracini 2010). However, as my earlier quote of Awbanawben shows, the very same ideas in many respects were in circulation in Indigenous communities in the nineteenth century and probably before. Awbanawben, for example, challenged settlers' deceitful self-effacement of their own causation of the potential "perishing" of Potawatomi people, their "[trampling] of the soil" and their undermining of peoples' rights and relationships to land, which underscores some of the key aspects of settler colonial domination that I will describe in this section. Moreover, a brief review of work in Indigenous intellectual traditions may reveal insights and discussions about settler colonialism from the last several hundred years (Lefevre 2015; Martinez 2011; Warrior 2017). Contemporary academics and writers, including many Indigenous feminists, have long named settler colonialism or used other terms referring to the same type of domination (Calhoun et al. 2007; Lefevre 2015; Maracle 2015; Speed 2017).

In my understanding, settler colonialism refers to complex social processes in which at least one society seeks to move permanently onto the terrestrial, aquatic, and aerial places lived in by one or more other societies who already derive economic vitality, cultural flourishing, and political self-determination from the relationships they have established with the plants, animals, physical entities, and ecosystems of those places. When the process of settler colonialism takes place or has already occurred in some region, the societies who are moving in or have already done so can be called "settlers," and the societies already living there at the beginning of settlement, "Indigenous peoples."

The settlers' aspirations are to transform Indigenous homelands into settler homelands. Settlers create moralizing narratives about why it is (or was) necessary to destroy other peoples (e.g., military or cultural inferiority), or they take great pains to forget or cover up the inevitable militancy and brutality of settlement. Settlement is deeply harmful and risk-laden for Indigenous peoples because settlers are literally seeking to erase Indigenous economies, cultures, and political organizations for the sake of establishing their own. Settler colonialism, then, is a type of injustice driven by settlers' desire, conscious and tacit, to erase Indigenous peoples and to erase or legitimate settlers' causation of such domination.

Looking closely at processes of settler colonial domination, there is an important ecological dimension—again, where I am using ecology in the sense discussed in the previous section. By seeking to establish their own homelands, settler populations are working to create their own ecologies out of the ecologies of Indigenous peoples, which often requires that settlers bring in additional materials and living beings (e.g., plants, animals) from abroad. Consider US settler colonial domination of Anishinaabewaki. The US rerouted the hydrology to facilitate its own forms of transportation and water use. The US mined, deforested, and industrialized the Great Lakes region. US settlers killed off or decimated many species and intentionally and unintentionally introduced new ones. The draining of wetlands, development of commercial agriculture and recreational areas, and building of massive urban areas and military, chemical, oil, and gas industries transformed the ecologies of Anishinaabewaki into a US settler ecology, including states such as Michigan, Wisconsin, Indiana, and Minnesota.

The US strategically sought to undermine the qualities of relationships that served Anishinaabe collective continuance. Historical accounts show that the US used patriarchy and racism to undermine Indigenous leadership. The US contained seasonal rounds through the creation of reservations, liquidation of land into private property, and illegalization of Indigenous ceremonial practices. In policies such as allotment of private property, Anishinaabe and other Indigenous peoples often sought to manage those properties cooperatively, which the US also worked to prevent.

The US did not regulate forms of pollution, terraforming and hydraulic engineering that specifically alter the ecological dynamics that Indigenous collective continuance is based on. The US pressured Indigenous governments to reengineer themselves as yearlong, voter-elected councils designed to facilitate extractive industries in Indigenous territories. Boarding schools worked to deliberately erase Indigenous languages and cultures, installing heteropatriarchal values and privileging the nuclear family that would ultimately replace, for many attendees, the more open and fluid gender and kinship systems of their heritages and intellectual traditions.

Each of these US settler strategies harms qualities of relationships that are crucial for Anishinaabe and Indigenous collective continuance. Patriarchy and uncontrolled extractive industries undermine consent. Knowledge destruction and corporate tribal government undermine the trustworthiness of knowers in their communities and the trustworthiness of leadership. Indigenous people then had to rely on scientists to protect their safety, but, in numerous cases, scientists did not report what they knew (e.g., the risks of exposure to industrially caused toxicity in fish). Containment and relocation destroy redundancy. At the same time, the actual environmental changes themselves hasten the undermining of qualities of relationships—such

as loss of knowledge and Indigenous legal/juridical systems coupled with the loss of landscapes from which those knowledge and legal/juridical systems came from. The harms just described impact negatively Indigenous peoples' persisting responsibilities and threaten Indigenous peoples' capacities to engender emerging responsibilities.

At the same time, the purpose of settler colonialism is for the US to establish its ecology and, hence, social resilience, in Indigenous ecologies or homelands. So the US too, to refer to a complex nation more simply, involves the establishment of its own ecology, at the expense of Indigenous ecologies. There is a deliberate attempt *not* to share ecologies. The US has had little to no interest in what Eve Tuck, Hannah Sultan, and Alison Guess (2014) have referred to as issues regarding "selfsame land," what Simpson (2008) refers to in her interpretation of the Dish with One Spoon treaty, what Witgen (2011) refers to as Anishinaabewaki (as a place of complex/diverse kinship).

As an environmental injustice, settler colonialism is a social process by which at least one society seeks to establish its own collective continuance at the expense of the collective continuance of one or more other societies—just one of its injustice-making features. Historically and today, there are many threats to collective continuance that are accidental and unavoidable, but settler colonial domination is not one of these threats. For Indigenous peoples under settler colonialism, wrongful domination is locatable at the intersection of settler intent to undermine Indigenous collective continuance (and hence Indigenous ecologies) through disrupting the qualities of relationships that are constitutive of collective continuance and that facilitate social resilience or adaptive capacity. Settler colonial domination undermines social resilience.

US settler colonialism, in terms of collective continuance, is a complex process because settlement inscribes the settler ecology. First, US settler ecology involves philosophies and practices associated with Europe, emerging US settler culture, and other parts of the world that are carved into Indigenous ecologies. D. Ezra Miller refers to what I am calling a carving process as the development and maintenance of "settlerscapes" (Miller 2016). Second, US settler ecologies involve erasures of the qualities of relationships that matter to Indigenous peoples. While US settler ecologies have attempted to establish qualities of relationships themselves, they have had trouble promoting qualities of consent and trust. While they did establish redundancy in a certain sense by taking over so much land and so many "resources," without other qualities of relationships, they have created a notoriously unsustainable society.

Both the byproducts and pollution of their economies are stored in sinks, such as the climate system or bodies of water, that are being destabilized or degraded, and resources such as coal or oil are going to run out. So to argue that one society pursues its collective continuance at the expense of another society is not to say that the former's collective continuance is somehow superior. The former's collective continuance could be highly anti-adaptive. In fact, what adaptive capacity the US does have is often tethered to wealth generated from exploitation, un-checked "growth," and extraction of nonrenewable resources.

As I see in the US, there is not a particularly high degree of qualities of relationships within the settler colonial system. The US actually tries to establish troubling "persisting" relationships with the environment by creating fictional imaginaries of its political and cultural legitimacy in North America, from the doctrine of discovery to the ideologies of "wilderness". At one point, each of these imaginaries was an "emerging" relationship, which people in the US took pains to transform into one they take to be "persisting." It should be noted that the US has rarely sought to create emerging and persisting relationships that are responsibilities, favoring instead the privileging of types of relationships such as rights, contracts (e.g. relating to private property), and consumer/commodity associations. So, while I can use collective continuance as a concept to describe the US, I cannot argue that the US has a high degree of collective continuance.

Third, because of this unsustainability and lack of flexibility of a particular formation of settler colonialism (I can imagine ones that are not), there is the creation of environmental injustices. The environmental problems created through unsustainable settler colonialism burden underprivileged populations. Environmental injustices are committed in at least two senses. In the US, Indigenous peoples, peoples of color, and many more populations who experience oppression live in environments where they experience more pollution and less capacity to have meaningful connections with the nonhuman world (Mohai et al. 2009). Then, perhaps because of a psychological issue that I do not have the space to discuss more here, settler populations suppress the unsustainability of their society, avoiding discussions of the industrial bases of their society. So many members of settler populations are not actually aware of the sources of their energy or consumer lifestyles. Because the spaces where energy is sourced are often populated with Indigenous peoples, people of color, and other groups who experience oppression, settler populations sometimes even deny that environmental injustice is an important issue.

A broad range of Indigenous testimonies and intellectual traditions describe settler colonialism as threatening social resilience. Awbanawben certainly saw the US as seeking to erase its own causation in the degradation of ecological relationships, and then forcing Indigenous peoples to accommodate the US by relocating. In the area of human-caused climate change, Simpson discusses how "Indigenous peoples have always been able to adapt, and we've had a resilience. But the speed of this—our stories and our culture and our oral tradition doesn't keep up, can't keep up. . . . Colonial thought brought us climate change (quoted in Klein 2013). In another case involving threats from extractive industries to Indigenous peoples in the Yukon territory, Norma Kassi, speaking of her Gwich'in community, says: "We cannot, however, simply change our diet. If we were to change suddenly and start eating store-bought foods more, then disease would increase and our rate of death would be higher, because it would be too rapid a change, too much of a shock to our systems" (1996: 80). Grace Dillon describes Indigenous science-fiction imaginations, often ones involving massive ecological degradation, as "survivance stories" that are about "persistence, adaptation, and flourishing in the future" (2016: 9). I read these writers, scholars, and activists as saying that settler colonialism deeply threatens the interplay of persisting and emerging responsibilities that is crucial for social resilience.

Settler colonial domination can be understood as an undermining of Indigenous adaptive capacity or social resilience. A key ecological dimension of such domination is how settler colonial strategies threaten qualities of relationships that constitute Indigenous ecologies or collective continuance. Settler colonial domination does so deliberately and at a pace that is too rapid for any society to be able to reasonably adjust to without compromising its self-determination and without avoiding harms that society would historically not have been susceptible to. What I have just described represents one dimension of how settler colonialism is violence that disrupts human relationships to the environment.

Environmental Violence and Settler Colonialism

Settler colonialism, as an ecological form of domination, is environmental violence. In the first paragraph of this article, I feature the voices of people who understand the disruption of relationships between humans and the environment as violent. Interpreting the disruptions ecologically, it is possible to identify some violent patterns of environmental injustice that arise from settler colonialism. While I do not think there is some exhaustive list of patterns of injustice, I do want to discuss at least two and give them labels for the sake of this essay. The first is "vicious sedimentation," which is the pattern of how environmental changes compound over time to

reinforce and strengthen settler ignorance against Indigenous peoples. The second is "insidious loops," which is the pattern of how historic settler industries that violated Indigenous peoples when they began are also implicated many years later in further environmental violence, such as climate injustice.

Vicious sedimentation refers to how constant ascriptions of settler ecologies onto Indigenous ecologies fortify settler ignorance against Indigenous peoples over time. In historic accounts of fur traders, clergy, and settlers, they certainly attempted to enclose regions such as Anishinaabewaki into settler concepts of nationhood, savage places, and so on. But in reading those accounts, the colonists nonetheless traveled through these regions and recognized the different Indigenous ecologies operative within those places. Witgen (2011), Sleeper-Smith (2001), Michael McDonnell (2015), and White (1991) provide accounts of European and US attempts to abide by Anishinaabe kinship-based forms of diplomacy. Yet, fast-forward more than two centuries later. People who participate in settler colonial domination are perhaps more likely to have their discriminatory beliefs about Indigenous peoples confirmed by the prevalence of settler ecologies that have forcibly overlaid Indigenous ecologies substantially and dramatically.

The Midwestern US, for example, appears to settlers, depending on where, as endless farming and commercial agriculture, recreational lakeshore, unoccupied parks, vast urban centers, wilderness space, golf courses, quaint towns, military installations, and so on. When settlers even walk onto an Indigenous jurisdiction or nearby a sacred site, there is a good chance that they experience no awareness of any difference from their own lives. From the soils and hydrology to the flora and fauna, all they can see are settler ways of life. Even references to "Native American inhabitation" in parks and tourist sites are often written by non-Indigenous persons and do not reflect the lives of the descendants of those "inhabitants" today. The lack of visibility of wild rice beds and the Indigenous communities who monitor and protect them, when settlers drive along highways, go on hikes, mine, or grow foods, among other activities, further solidifies the presumption that Indigenous peoples are absent. Urban gentrification in Midwestern cities erases any traces of Indigenous origins of the area. Gentrification processes often commodify highly selective memories and legacies of other groups, often people of color, who lived there before the most recent gentrification process.

Mishuana Goeman develops the concept of "settler grammars of place" to describe "repetitive practices of everyday life that give settler place meaning and structure" (2014: 237). Yet sedimentation and repetitiveness do not mean that there are no Indigenous ecologies living and operative in the world. Goeman's work is importantly about "constant mobility" (239) too. Goeman shows how Indigenous peoples develop and renew qualities of relationships among humans and nonhumans in environments that settlers would think bear no traces of Indigenous ecologies—such as the city of Los Angeles:

Often, it was necessary for women to practice gendered relations outside the cultural forms learned from their mothers, aunties and grandmothers. These practices of relating to each other were not 'outdated' in the city, but instead the elements of these practices that persisted were and continue to be vital to Native navigations in urban centers. In many ways, the lack of the dominant culture's understanding of Native peoples' capacity to reach out to others beyond their specific Tribal Nation was a major flaw in the goals of Relocation policy. In fact, the propensity for sharing where one is from and learning to live with each other comes from thousands of years of experience living on this continent together—it is as instinctive as breathing. (2009: 175)

At one level, then, sedimentation renders settler populations unwilling to accept Indigenous peoples as adaptive people with long *and* continuing histories in North America. In the strands

of Anishinaabe intellectual traditions I drew from earlier, many of the scholars have pointed to settlers' unwillingness to recognize Anishinaabe migration, seeking to fix particular groups of people into nations or other formations that have immovable territorial boundaries. Reading Goeman suggests a different approach. For example, if migration, as social resilience, flourishes through qualities of relationships, then the qualities of relationships are constantly manifesting in different ways, through persisting and emerging responsibilities. Qualities like trust, consent, diplomacy, and redundancy can guide efforts to achieve safety, justice, and wellness under hostile conditions.

The sedimentation is vicious because it significantly damages settlers' inclinations for consensual decision-making with Indigenous peoples. Consider how strictly bounded reservations erase the larger territories that are significant to Indigenous peoples. In the Dakota Access Pipeline issue, pipeline proponents claim that "The Dakota Access Pipeline does not cross land owned by the Standing Rock Sioux" (DAPL Facts 2018). North Dakota State congressperson Kevin Cramer (2016) claims that "The pipeline does not cross any land owned by the Standing Rock Sioux. The land under discussion belongs to private owners and the federal government. To suggest that the Standing Rock tribe has the legal ability to block the pipeline is to turn America's property rights upside down." These claims, of course, efface the long histories of nonconsensual land dispossession along the pipeline's route and the efforts of the Oceti Sakowin over many years to maintain collective self-determination against multiple threats generated by the US. Sedimented dispossession then makes it seem to settlers that the pipeline today does not require Indigenous consent since it is off reservation.

At the same time, vicious sedimentation explains why certain allies are unable to advocate effectively for Indigenous peoples. Some allies of the tribe also mistakenly reduced the issue to that of the immediate threat to water and cultural heritage of a single pipeline. So these allies' advocacy does not engage the longer and larger issues pertaining to mechanisms of colonial power that engendered and maintain land dispossession and the denial of self-determination. Bonita Lawrence and Enakshi Dua (2005) and Tuck and Yang (2012) have written about innocence, in which privileged persons feel that their daily actions and aspirations for justice are not implicated in settler colonial domination. Hence, these persons get to feel good about advocating for Indigenous peoples without having to take on the hard work of doing anything that will change the underlying land-based structures of domination that secure Indigenous disempowerment. These underlying land-based structures are what made it possible in the first place for the Dakota Access Pipeline—including the process of its construction—to even be something that some people would envision as good.

Innocence also pertains to allies who are disappointed when they find out that Indigenous peoples in various cases do not "live off the land" as their ancestors may have done or are Christian. In the absence of any capacity to recognize living Indigenous ecologies or the realities of settler-caused ecological destruction, they work with whatever information they have gleaned from the biased sources they have access to. These sources do not discuss Indigenous peoples beyond rather static portrayals that are demographically unfounded. In psychology, this is often called the representative heuristic (Kahneman et al. 1982). Vicious sedimentation drives the process of limiting representativeness and creates conditions for ignorant people to become frustrated when it turns out that an Indigenous community is struggling for aspirations that are complex and dynamic and that seek to confront the realities of ecological destruction.

Insidious loops refer to the complex feedback from ecological systems that is particularly harmful for Indigenous peoples. Consider climate justice. The destabilization of the climate system, or human-caused (anthropogenic) climate change, produces ecological conditions that disrupt human societies, through impacts such as rising sea levels, more severe droughts,

warming freshwater, and faster melting glaciers. It is certainly true that "all humanity" faces climate risk. Yet a scan of scientific reports from the US Global Change Research Program and the Intergovernmental Panel on Climate Change shows that Indigenous peoples are among the populations whose well-being is threatened the most.

One of the most notable cases involves those Indigenous peoples who are among the first groups to make decisions about whether and how to relocate because of sea level rise in the Arctic, the Gulf of Mexico, and other places. Moreover, disproportionate Indigenous suffering is produced by changing environmental conditions—and once again—the machinations of US settler colonialism. Many relocating tribes, for example, are vulnerable precisely because they were forced to live permanently on tiny areas of land with limited adaptive options. The shrinking of their lands occurred before today's climate change ordeal through US military expansion, settler oil and gas companies pipelines, public water control infrastructure and flood control measures, and the development of industrial agriculture, among other factors (Maldonado et al. 2013). The climatic vulnerability of these tribes today is the looping effect of US strategies to undermine Indigenous qualities of responsibilities through land dispossession/shrinkage and the pollution/emissions of many industrial activities whose operations are/were secured through colonial land dispossession/shrinkage.

The looping effects of undermining qualities of responsibilities, such as consent or trust, are evident in how climate change also opens up more Indigenous territories, such as in the Arctic, to pressure from colonial exploitation, as thawing snow and ice create access to resources, such as oil and other hydrocarbons, that were previously hard to access. This climate-related development, as well as booms in extractive industries due to other causes, increases detrimental effects already experienced with past extractive industries. The workers camps, or "man camps," created to support drilling and mining, intensify sexual and gender violence through increases in the trafficking of Indigenous women and children (Deer and Nagle 2017; Sweet 2014a, 2014b). Sarah Deer and Mary Kathryn Nagle describe how "the trafficking of Native women and children is not a new phenomenon. . . . Sexual exploitation of Native women and children, dating back to the times of the Spanish Conquistadors, often times accompanies the colonial conquest of tribal lands." Yet "the Bakken oil boom has created a renewed sense of urgency in areas that have recently experienced a rapid increase in oil extraction" (2017: 36). Victoria Sweet (2014b) describes how workers in extractive industries often have "no community accountability," which presents major problems for Indigenous women and children when workers' presence increases in a region. Climate change, then, is part of a looping process that, in conjunction with ongoing colonialism, engenders violence and environmental injustice against Indigenous peoples.

Vicious sedimentation and insidious loops are patterns of environmental injustice that are characteristic of settler colonial domination when considering the ecological dimension of settlement. At the surface level, environmental violence manifests as the imposition of environmental destruction and pollution. At another level, it is possible to look at environmental violence as undermining the qualities of relationships that are constitutive of any society's social resilience or collective continuance. Hence, settler sedimentation (i.e., "settlerscapes," "settler grammars of place"), settler "innocence," and gender and sexual violence are ecological issues. But I do not mean so in the sense that they are subsumable under some conception of the environment. Nor do I mean that the examples I gave of vicious sedimentation and insidious loops are ecological simply because they somehow implicate the environment. Rather, I am relating violence to ecology to highlight the ways they are very much related to systems concepts such as resilience, adaptive capacity, and sustainability—what I have described through centering concepts of collective continuance and Indigenous ecologies. For, using these ecological concepts, problems like the Dakota Access Pipeline and the trafficking of Indigenous women and children

are violations of trust, consent, diplomacy, and redundancy (redundancy, given these problems' connections to land dispossession).

In this article, the approach to settler colonial domination has implications for current projects of reconciliation and the establishment of justice for Indigenous peoples. Honoring qualities of relationships requires, as a matter of Indigenous collective continuance, that settler nations relate to Indigenous peoples in ways that secure needed lands (for the sake of protecting redundancy) and changing policies that undermine trust, diplomacy, and consent. While I do not have the space for elaborating actions that establish justice, I am nonetheless noting here what the implications of this theoretical outline are for unambiguous requirements on settler states for establishing justice.

At the same time, theories of collective continuance have moral implications for Indigenous communities themselves. For myself and many I know, we live among a host of projects to revitalize Indigenous sovereignty and traditions. Yet, within our communities, many of us have experienced oppressive forms of self-determination and revitalization, where our own people seek to bring back types of relationships without attending to qualities of relationships. Examples include aspirations to Indigenous sovereignty that do not attempt to restore genuine consent or trust and practices of cultural revitalization that are dominated by patriarchy. Examples like these ignore the moral significance of qualities of relationships in the operation of emerging responsibilities (e.g., US-recognized forms of sovereignty) or persisting responsibilities (e.g., language maintenance). Collective continuance, as a value, can be used to assess both settler and Indigenous attempts to foster conditions of justice. The outline of the theory offered here seeks then to be compatible with important recent work in Indigenous studies that supports much stronger connections between Indigenous peoples and ecosystems than are found in settler laws and policies and settler approaches to reconciliation.

■ KYLE WHYTE is the Timnick Chair in the Humanities and Associate Professor of Philosophy and Community Sustainability at Michigan State University. His research covers areas including Indigenous climate and environmental justice, the ethics of intercultural knowledge exchange, and Indigenous philosophies of food sovereignty and environmental futures. He is an enrolled member of the Citizen Potawatomi Nation. Email: kwhyte@msu.edu

REFERENCES

Andow, David, Theresa Bauer, Mark Belcourt, Paul Bloom, Brenda Child, Jill Doerfler, Amber Eule-Nashoba, et al. 2009. "Preserving the Integrity of Manoomin in Minnesota." Wild Rice White Paper prepared for "People Protecting Manoomin: Manoomin Protecting People—A Symposium Bridging Opposing Worldviews," White Earth Indian Reservation, 25–27 August.

Andrews, Jennifer Courtney Elizabeth, and Kimberly M. Blaeser. 2007. "Living History: A Conversation with Kimberly Blaeser." *Studies in American Indian Literatures* 19 (2): 1–21. https://doi.org/10.1353/ail.2007.0015.

Bacon, J. M. 2018. "Settler Colonialism as Eco-Social Structure and the Production of Colonial Ecological Violence." *Environmental Sociology.* Published online 28 May: 1–11. https://doi.org/10.1080/232 51042.2018.1474725.

Bang, Megan, and Douglas Medin. 2010. "Cultural Processes in Science Education: Supporting the Navigation of Multiple Epistemologies." *Science Education* 94 (6): 1008–1026. https://doi.org/10.1002/sce.20392.

- Bohaker, Heidi. 2006. "Nindoodemag': The Significance of Algonquin Kinship Networks in the Eastern Great Lakes Region, 1600–1701." *The William and Mary Quarterly* 63 (1): 23–52.
- Borrows, John. 2002. *Recovering Canada: The Resurgence of Indigenous Law.* Toronto: University of Toronto Press.
- Calhoun, Anne, Mishuana Goeman, and Monica Tsethlikai. 2007. "Achieving Gender Equity for American Indians." In *Handbook for Achieving Gender Equity through Education*, ed. Susan S. Klein, Barbara Richardson, Dolores A. Grayson, Lynn H. Fox, Cheris Kramarae, Diane S. Pollard and Carol Anne Dwyer, 525–551. New York: Routledge.
- Child, Brenda J. 2012. Holding Our World Together: Ojibwe Women and the Survival of Community. New York: Penguin.
- Cramer, Kevin. 2016. "What the Dakota Access Pipeline Is Really About." Wall Street Journal, 6 December.
- Craft, Aimée. 2014. "Living Treaties, Breathing Research." *Canadian Journal of Women and the Law* 26 (1): 1–22.
- DAPL Facts (Dakota Access Pipeline Facts). 2018. "The Dakota Access Pipeline Does Not Cross Land Ownded by the Standing Rock Sioux." Accessed 19 June. https://daplpipelinefacts.com/dt_articles/dakota-access-pipeline-not-cross-land-owned-standing-rock-sioux.
- Darnell, Regna. 1998. "Rethinking the Concepts of Band and Tribe, Community and Nation: An Accordion Model of Nomadic Native American Social Organization." *Algonquian Papers* 29: 92–105.
- Deer, Sarah, and Mary Kathryn Nagle. 2017. "The Rapidly Increasing Extraction of Oil, and Native Women, in North Dakota." *The Federal Lawyer*, April, 35–37.
- Dillon, Grace L. 2016. "Beyond the Grim Dust of What Was." In Nicholson 2016: 9–11.
- Erdrich, Louise. 2006. Books and Islands in Ojibwe Country. New York: Harper.
- Goeman, Mishuana R. 2009. "Notes toward a Native Feminism's Spatial Practice." *Wicazo Sa Review* 24 (2): 169–187. https://doi.org/10.1353/wic.0.0040.
- Goeman, Mishuana R. 2014. "Disrupting a Settler-Colonial Grammar of Place: The Visual Memoir of Hulleah Tsinhnahjinnie." In *Theorizing Native Studies*, ed. Audra Simpson and Andrea Smith, 235–265. Durham, NC: Duke University Press.
- GLIFWC (Great Lakes Indian Fish and Wildlife Commission). 1995. Sulfide Mining: The Process and the Price—A Tribal and Ecological Perspective. Odana, WI: GLIFWC.
- Johnston, Basil. 1976. Ojibway Heritage. New York: Columbia University Press.
- Kahneman, Daniel, Paul Slovic, and Amos Tversky. 1982. *Judgment under Uncertainty: Heuristics and Biases.* Cambridge: Cambridge University Press.
- Kassi, Norma. 1996. "A Legacy of Maldevelopment." In *Defending Mother Earth: Native American Perspectives on Environmental Justice*, ed. Jace Weaver, 72–83. Maryknoll, NY: Orbis Books.
- Kimmerer, Robin. 2010. "The Giveaway." In *Moral Ground*, ed. Kathleen Dean Moore and Michael P. Nelson, 141–145. San Antonio, TX: Trinity University Press.
- Kimmerer, Robin. 2013. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants.* Minneapolis: Milkweed Editions.
- Klein, Naomi. 2013. "Dancing the World into Being: A Conversation with Idle No More's Leanne Simpson." *Yes! Magazine*, 5 March. http://www.yesmagazine.org/peace-justice/dancing-theworld-into-being-a-conversation-with-idle-no-more-leanne-simpson.
- Lawrence, Bonita, and Enakshi Dua. 2005. "Decolonizing Anti-racism." Social Justice 32 (4).
- Lefevre, Tate A. 2015. "Settler Colonialism." In *Oxford Bibliographies in Anthropology*, ed. John L. Jackson, published online with no page numbers. Oxford: Oxford University Press.
- Maldonado, Julie Koppel, Christine Shearer, Robin Bronen, Kristina Peterson, and Heather Lazrus. 2013. "The Impact of Climate Change on Tribal Communities in the US: Displacement, Relocation, and Human Rights." *Climatic Change* 120 (3): 601–614. https://doi.org/10.1007/s10584-013-0746-z.
- Maracle, Lee. 2015. Memory Serves. Edmonton, AB: NeWest Press.
- Martinez, David. 2011. The American Indian Intellectual Tradition: An Anthology of Writings from 1772 to 1972. Ithaca, NY: Cornell University Press.

- McGregor, Deborah. 2009. "Honouring Our Relations: An Anishnaabe Perspective on Environmental Justice." In *Speaking for Ourselves: Environmental Justice in Canada*, ed. Julian Agyeman, Peter Cole, Randolph Haluza-Delay, and Pat O'Riley, 27–41. Vancouver: University of British Columbia Press.
- Miller, D. Ezra. 2016. "But It Is Nothing Except Woods: Anabaptists, Ambitions, and a Northern Indiana Settlerscape, 1830–1841." In *Rooted and Grounded: Essays on Land and Christian Discipleship*, ed. Ryan D. Harker and Janeen Bertsche Johnson, 208-2017. Eugene: Pickwick Publications.
- Mohai, Paul, David Pellow, and J. Timmons Roberts. 2009. "Environmental Justice." *Annual Review of Environment and Resources* 34: 405–430. https://doi.org/10.1146/annurev-environ-082508-094348.
- Nicholson, Hope. 2016. Love Beyond Body, Space, and Time: An Indigenous LGBT Sci-Fi Anthology. Winnipeg: Bedside Press.
- Noodin, Margaret. 2014. Bawaajimo: A Dialect of Dreams in Anishinaabe Language and Literature. Michigan State University Press.
- O'Brien, Jean M. 1997. Dispossession by Degrees: Indian Land and Identity in Natick, Massachusetts, 1650–1790. Cambridge: Cambridge University Press.
- Simpson, Leanne. 2008. "Looking after Gdoo-Naaganinaa: Precolonial Nishnaabeg Diplomatic and Treaty Relationships." *Wicazo Sa Review* 23 (2): 29–42. https://doi.org/10.1353/wic.0.0001.
- Sinclair, Niigaan. 2016. "Returning to Ourselves: Two Spirit Futures and the Now." In Nicholson 2016: 12–19.
- Sinclair, Niigonwedom James. 2009. "A Sovereignty of Transmotion: Imagination and the 'Real,' Gerald Vizenor, and Native Literary Nationalism." Paper presented at Stories through Theories, Theories through Stories: North American Indian Writing, Storytelling, and Critique.
- Sinclair, Niigonwedom James. 2013. "Nindoodemag Bagijiganan: A History of Anishinaabeg Narrative." PhD diss., University of British Columbia.
- Sleeper-Smith, Susan. 2001. *Indian Women and French Men: Rethinking Cultural Encounter in the West-ern Great Lakes.* Amherst: University of Massachusetts Press.
- Sleeper-Smith, Susan. 2005. "[A]n Unpleasant Transaction on This Frontier': Challenging Female Autonomy and Authority at Michilimackinac." *Journal of the Early Republic* 25 (3): 417–443. https://doi.org/10.1353/jer.2005.0066.
- Speed, Shannon. 2017. "Structures of Settler Capitalism in Abya Yala." *American Quarterly* 69 (4): 783–790. https://doi.org/10.1353/aq.2017.0064.
- Stark, Heidi Kiiwetinepinesiik. 2012. "Marked by Fire: Anishinaabe Articulations of Nationhood in Treaty Making with the US and Canada." *American Indian Quarterly* 36 (2): 119–149. https://doi.org/10.5250/amerindiquar.36.2.0119.
- Sweet, Victoria. 2014a. "Extracting More Than Resources: Human Security and Arctic Indigenous Women." Seattle University Law Review 37 (4). https://ssrn.com/abstract=2533164.
- Sweet, Victoria. 2014b. "Rising Waters, Rising Threats: The Human Trafficking of Indigenous Women in the Circumpolar Region of the US and Canada." *Yearbook of Polar Law Online* 6 (1): 162–188.
- TallBear, Kimberly. 2013. *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis: University of Minnesota Press.
- Tuck, Eve, Allison Guess, and Hannah Sultan. 2014. "Not Nowhere: Collaborating on Selfsame Land." Decolonization: Indigeneity, Education and Society, 26 June.
- Tuck, Eve, and K. Wayne Yang. 2012. "Decolonization Is Not a Metaphor." *Decolonization: Indigeneity, Education and Society* 1 (1).
- Veracini, Lorenzo. 2010. Settler Colonialism. New York: Palgrave Macmillan.
- Vizenor, Gerald R. 1999. Manifest Manners: Narratives on Postindian Survivance. Lincoln: University of Nebraska Press.
- Warrior, Robert Allen, ed. 2017. The World of Indigenous North America. New York: Routledge.
- Watts, Vanessa. 2013. "Indigenous Place-Thought and Agency Amongst Humans and Non-Humans (First Woman and Sky Woman Go on a European World Tour!)." *Decolonization: Indigeneity, Education and Society* 2 (1): 20–34.

- WEA (Women's Earth Alliance) and NYSHN (Native Youth Sexual Health Network). 2016. Violence on the Land, Violence on Our Bodies: Building an Indigenous Response to Environmental Violence. Toronto: WEA and NYSHN. http://landbodydefense.org/uploads/files/VLVBReportToolkit2016.pdf.
- White, Richard. 1991. *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region,* 1650–1815. Cambridge: Cambridge University Press.
- Whyte, K.P. 2015. "Indigenous Food Systems, Environmental Justice and Settler Industrial-States." In *Global Food, Global Justice: Essays on Eating under Globalization*, ed. M. Rawlinson and C. Ward, 143–156. Cambridge: Cambridge Scholars Publishing.
- Witgen, Michael. 2011. *An Infinity of Nations: How the Native New World Shaped Early North America*. Philadelphia: University of Pennsylvania Press.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.